Docket No. 203512US77

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: William M. CANFIELD

SERIAL NO: 10/023 889

FILED: December 21, 2001

GAU: 1645

EXAMINER:

METHOD OF PRODUCING HIGH MANNOSE GLYCOPROTEINS IN COMPLEX CARBOHYDRATE

DEFICIENT CELLS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97 SIGNER FOR PATENTS DECFIVED

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

AUG 0 1 2003

SIR:

FOR:

Applicant(s) wish to disclose the following information.

TECH CENTER 1600/2900

REFERENCES

- The applican(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.

RELATED CASES

- □ Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Richard L. Chinn, Ph.D. Registration No. 34,305

Daniel J. Pereira, Ph.D. Registration No. 45,518

22330 el. (703) 413-3000

Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 05/03)

JUL 3 1 2009 SHEET

SHEET 1 OF 3

Form PTO 1449 (Modified)		U.S. OEPARTMEN PATENT AND TR	IT OF COMMERCE ADEMARK OFFICE	203512US77			10/023,889				
LIST OF	REFE	RENCES CITED BY A	PPLICANT	APPLICANT William M. CANFI				AUG 0 1 2003			
				FILING DATE			GROUP	CH CENTER 1600/2			
				December 21, 20	01		1645	OF CENTER 1600/2			
				U.S. PATENT DOCUM	ENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME		CLASS	SUB CLASS	FILING DATE IF APPROPRIATE			
	AA										
	AB										
	AC										
	AD										
	AE							1			
	AF										
	AG										
	АН										
	Al										
	AJ										
	AK										
	AL										
	АМ										
	AN										
			FO	REIGN PATENT DOCU	MENTS						
		DOCUMENT NUMBER	DATE	COL	JNTRY		YES	TRANSLATION NO			
	AO	99/31117	06/24/99	WIPO							
	AP										
	AQ										
	(OTHER R	EFERENCES (Including Author, Title	Date Pertinen	Pages, et	c.)	1			
								-1-phosphotransferase"			
	AS	Glycobiology, Vol. 2,	Ke-Wei ZHAO, et al., "Purification and characterization of human lymphoblast N-acetylglucosamine-1-phosphotransferase", Glycobiology, Vol. 2, no. 2, pp. 119-125, 1992								
	АТ	Takahiro NAGASE, et al., "Prediction of the Coding Sequences of Unidentified Human Genes. XV, The Complete Sequences of 100 New(cDNA Clones from Brain Which Code for Large Proteins <i>in vitro</i> ", DNA Research, Vol. 6, pp. 337-345, 1999									
	AU	Unidentified Human	Senes, XV. The	ragment)", From Takah Complete Sequences of . 6, pp. 337-345, 1999	iro NAGASE, et : f 100 New(cDNA	al., "Predict Clones fro	ion of the m Brain W	Coding Sequences of hich Code for Large			
	AV	XP-002226187, "Bas From CORDES, et al	c domain/leucin , "The mouse s	e zipper transcription fa- egmentation gene kr end tion factor" (1994), Cell,	codes a novel	Addit	ional Refe	rences sheet(s) attached			
Examiner						Date Con	sidered				
	Hall Id -	ofournes in equal to	udother or	citation is in conforman	with MDES SO			-14-41 16 1			

JUL 3 1 200 SHEET 2 OF 3

Form PTO 1449		U.S. DEPARTMENT O	F COMMERCE	ATTY DOCKET NO.	134	3	SERIAL NO.			
(Modified)		PATENT AND TRADE	MARK OFFICE	ATTY DOCKET NO. 203512US77			10/023,889 RECEIVE			
				APPLICANT				•	LOL	1 V L
LIST OF	REFE	RENCES CITED BY APP	LICANT	William M. CANFIE	LD				A++	2000
				FILING DATE			GROUP		AUG 0 I	2003
				December 21, 2001			1645	TEAL+	<u> </u>	
				U.S. PATENT DOCUMEN	ITS			IEUH	CENTER	1600,
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME		CLASS	SUB CLASS		ILING DATE	
	BA									
	BB									
	вс									
	BD									
	BE									
	BF									
	BG									
	вн									
	ВІ									
	BJ									
	вк									
	BL									
	ВМ									
	BN									
			FOI	REIGN PATENT DOCUM	ENTS					1
		DOCUMENT NUMBER	DATE	COUN	ITRY			TRANS		
	во						YES	,	NO	-
	BP									
	BQ									
	BR									
	BS									
	BT									
	BU							-+		
	BV							_		
		OTHER RES	CDENCES (ncluding Author, Title, D	ata Bartinant	Pages of	- \			
				ification and Kinetic Param				namina	1 phaophas	licator
	вw	alpha-N-Acetylglucosam 1994	Inidase", The	Journal of Biological Che	mistry, Vol. 26	9, No. 3, Is:	sue of Jan	uary 21	, pp. 1718-1	726,
	вх	Jin Kyu LEE, et al., "Pur Acetylglucosaminidase",	fication and of Archives of I	Characterization of Human Biochemistry and Biophysi	Serum N-Ace ics, Vol. 319, N	tylglucosar lo. 2. June	nine-1-pho 1, pp. 413	sphodie -425, 19	ester alpha-N 195	1-
	BY			nd characterization of hur obiology, Vol. 6, no. 6, pp			glucosami	ne-1-ph	osphodieste	
	BZ	Journal of Biological Che		omal Enzyme Phosphoryla 267, No. 32, Issue of Nove		Additi	onal Refe	rences s	sheet(s) atta	ched
Examiner		23342-23348, 1992				Date Cons				\dashv
		f			W 14050 00			1. 11		
conformance a	tial if re and no	eterence is considered, w t considered. Include cop	netner or not y of this form	citation is in conformance with next communication	with MPEP 60 to applicant.	9; Draw lin	e through	citation	if not in	1

SHEET 3 OF 3

					JUL 3 1 Z	WU 25			
Form PTO 1449 (Modified)		U.S. DEPARTMENT O PATENT AND TRADE	F COMMERCE MARK OFFICE	ATTY DOCKET NO. 203512US77	A TO A TO A TO	HETE.	SERIAL I 10/023,	8RECE	IVED
				APPLICANT					
LIST OF REFERENCES CITED BY APPLICANT			William M. CANFI	ELD			AUG 0	1 2003	
				FILING DATE			GROUP		2000
				December 21, 200)3		1645F	CH CENTER	1600/00
				U.S. PATENT DOCUME	NTS				
EXAMINER INITIAL			NAME		CLASS	SUB CLASS	FILING I IF APPRO		
	CA								
	СВ								
	CC								
	CD								
	CE								
	CF					ļ			
	CG								
	CH								
	CI								
	CJ								
	СК								
	CL								
	СМ								
	CN								
			FO	REIGN PATENT DOCU	MENTS				
		DOCUMENT NUMBER	DATE	cou	JNTRY		YES	TRANSLATION	NO 1
	co								
	CP								
	CQ								
	CR								
	cs								
	CT								
	CU								
	CV								
		OTHER REF	ERENCES (ncluding Author, Title,	Date, Pertinent	Pages, et	c.)		
		Ritva TIKKANEN, et al.,	"Several coo	perating binding sites m	ediate the interac	ction of a ly		nzyme with	
	cw	phosphotransferase", TI	ie ⊭WBO Jon	mai, voi. 16, No. 22, pp.	0084-6693, 199	97			
	сх	Fumito MATSUURA, et intracellular and secrete 339,1998	d glycoforms	overexpressed by Chine	ese hamster ovar	ry cells", Gi	ycobiology	r, vol. 8, no. 4,	рр. 329-
	CY	Shiroh MAGUCHI, et al. from Human Hepatoma				ate in the 0 5, 1988	Carbohydra	te Moiety of Ca	athepsin D
	cz	Norman W. Barton, et a glucocerebrosidase in a USA, Vol. 87, pp. 1913-	patient with 0	Saucher disease", Proc.	us infusions of Natl. Acad. Sd,	Addit	ional Refe	rences sheet(s) attached
Examiner						Date Con	Considered		
*Examiner: In	itial if re	eference is considered, w	hether or not	citation is in conformance	e with MPEP 60	9; Draw lin	e through	citation if not in	
conformance	and no	t considered. Include cop	y of this form	with next communicatio	n to applicant.				1



P.B.5818 - Patentiaan 2 2280 HV Rijswijk (ZH) S +31 70 340 2040 TX 31651 epo nl FAX +31 70 340 3016

Europäisches Patentamt in Den Haag RecherchenEuropean Patent Office Branch at The Hague Search division

Office européen des brev ts Département à

La Haye Division de la recherche

Audier, Philippe André Brevalex, 3, rue du Docteur Lancereaux 75008 Paris

FRANCE

BREVALES. 5 AVK. 2003 3, rue Ju Doctour Lancereaux 75008 PARIS

Datum/Date 1 4, 04, 03

schen/Ret./Réf. SR 21180 US/EE

Anmeldung Nr./Application No./Demande n°./Patent Nr./Patent No./Brevet n°.
00961335.7 -

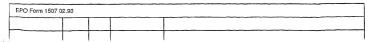
melder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire Canfield, William M.

COMMUNICATION

T	he Europe	an Patent Office herewith transmits			
		the European search report			
		the declaration under Rule 45 EPC			
		the partial European search repor	tunder Rule 45 EPC		
	ĬZ]		ch report concerning the international application und uropean patent application. Copies of the documents		
1	he following	ng specifications given by the applic	ant have been approved by the Search Division :		
		Abstract	☐ Title	Figure	
		The abstract was modified by the S	Search Division and the definitive text is attached to thi	is communication.	
		The following figure will be published the invention than the one indicate Figure:	ed with the abstract, since the Search Division consided by the applicant.	ers that it better chara	cterises.
	×	Additional copy(copies) of the docu	uments cited in the European search report.	SHOPHES PATCHING	المارية



If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



Application Number

CLAIMS INCURRING FEES
The present European patent application comprised at the time of filing more than ten claims.
Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.
LACK OF UNITY OF INVENTION
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
see sheet B
All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patient application which relate to the inventions in respect of which search fees have been paid, namely datins:
1-67, 74-105
None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:
med mentioned in the claims, harrory warms.
-

INCOMPLETE SEARCH SHEET C

Application Number EP 00 96 1335

Although claims 74-81 are directed to a method of treatment of the human/animan body (Article 52(4) EPC), the search has been carried out and based on the alleged effects of the compound/composition.

Claim(s) searched incompletely: 43, 49, 52, 57, 67, 69, 76, 79, 80

Reason for the limitation of the search:

Present claims 43, 52, 67, 69, 76, 79 and 80 and especially Claims 49 and 57 relate to an extremely large number of possible compounds or methods. Support within the meaning of Article 84 EPC and/or disclosure within the meaning of Article 83 EPC is to be found, however, for only a very small proportion of the compounds or methods claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Unless the alternatives in said claims 43, 52, 67, 69, 76, 79 and 80 relate to a claim which itself is novel and inventive, they will give rise to further non-unity objections.

The same applies for claims 49 and 57 provided an attempt will be made to specify the compounds claimed.

In this context it should be emphasised that the drafting of the claims lies exclusively in the reponsability of the Applicant and that e.g. non-unity objections which arise due to the drafting of certain subject-matter in an independent form, cannot be cured by making reference to the fact that said independently claimed subject-matter forms part of a common (but unfortunately known) concept, e.g. two independently claimed steps of a known process.

LACK OF UNITY OF INVENTION SHEET B

Application Number EP 00 96 1335

4 1

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-18, 82, 84, 86, 88-105

GlcNAc-phosphotransferase and subunits thereof, an antibody binding it, nucleotide sequences encoding it or encoding the subunits, methods for producing the enzyme, vectors and host cell comprising the nucleotide sequences coding for the enzyme or the subunits

2. Claims: 19-34, 83, 85, 87

Phosphodiester alpha-GlcNAcase, an antibody binding it, nucleotide sequence encoding it, vectors and host cells comprising the nucleotide sequence and methods for producing the enzyme

3. Claims: 35-48

Method of modifying lysosomal hydrolases comprising contacting said lysosomal hydrolases with an isolated GlcNAc-phosphotransferase

4. Claims: 49-67

Phosphorylated lysosomal hydrolase comprising a mannose 6-phosphate amnd methods for preparing phosphorylated lysosomal hydrolase

5. Claims: 68-73

High mannose lysosomal hydrolase and methods for producing it

6. Claims: 74-81

Methods of treating a patient suffering from a lysosomal storage disease $% \frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2$

European Pat nt Offic

SUPPLEMENTARY

PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent ConventionEP 00 96 1335 shall be considered, for the purposes of subsequent proceedings, as the European search report

	DOCUMENTS CONSID	ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)
X Y		HUMAN LYMPHOBLAST N -PHOSPHOTRANSFERASE" , pages 119-125,	1,2	C12N9/12 C12N9/14 C12N1/20 C12N15/00 C07H21/04 A61K38/44 A61K38/51 C07K14/00
		-/		
				TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The su	upplementary search report has b	een based on the last set of claims vali	d	
The Sear not comp be carried Claims so	MPLETE SEARCH ch Division considers that the present	application, or some or all of its claims, does a meaningful search into the state of the art	/do	-
Claims no	ot searched:			
	or the limitation of the search: Sheet C			
	Place of search	Date of completion of the search		Examiner
	MUNICH	26 March 2003	Gro	sskopf, R
X : part Y : part doc A : tech O : nor	ATEGORY OF CITED DOCUMENTS ilcularly relevant if taken alone ilcularly relevant if combined with ano ument of the same category notogical background written disclosure umediate document	T : theory or principl E : earlier patent do after the filing da ther D : document clied f L : document clied f	le underlying the current, but publite in the application or other reasons	invention ished on, or





PARTIAL EUROPEAN SEARCH REPORT Application Number

Category	Citation of document with indication, where appropriate,	Relevant	APPLICATION (Int.CI.7)
Jale gory	of relevant passages	to claim	
P,X P,X	NAGASE T ET AL: "PREDICTION OF THE CODING SEQUENCES OF UNIDENTIFIED HUMAN GENES. XV. THE COWPLETE SEQUENCE OF 100 NEW CDNA CLONES FROM BRAIN WHICH CODE FOR LARGE PROTEINS IN VIVO" DNA RESEARCH, UNIVERSAL ACADEMY PRESS, JP, vol. 6, no. 5, October 1999 (1999–10), pages 337–345, XP000865804 ISSN: 1340-2838 see the whole document — & DATABASE SWALLPROT 'Online! 1 May 2000 (2000–05–01) retrieved from EBI	8-10, 88-99	
	Database accession no. Q9ULL2 XPO02225188 * abstract * 99.8% ientity with SEQ ID NO: 1 from aa 308-930 and 100% identity with SEQ ID NO: 2		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
X	DATABASE SWALLPROT 'Online! 1 November 1996 (1996-11-01) retrieved from EBI Database accession no. Q61340 XP002226187 57.9% identity with SEQ ID NO: 1 in 285 aa overlap (aa 645-930 of SEQ ID NO: 1)	8-10,91	
x	WO 99 31117 A (FLORENCE KIMBERLY; HUMAN GENOME SCIENCES INC (US); FENG PING (US); 24 June 1999 (1999-06-24) Human secreted protein encoded by gene 6 has 100% identity with SEQ ID NO: 3 see SEQ ID NO: 130	8-10, 102-105	



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

Catagory Citation of document with indication, where appropriate, of claim of relevent passages X		DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF TH APPLICATION (Int.Cl.7)		
"Purification and kinetic parameters of bovine liver N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminelase." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 269, no. 3, 1994, pages 1718-1726, XPO02235767 ISSN: 0021-9258 X LEE JIN KYU ET AL: "Purification and Characterization of Human Serum N-Acetylglucosamine-1-phosphodiester alpha-N-Acetylglucosamine-1-phosphodiester alpha-N-Acetylglucosamine-1-phosphodiester ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol. 319, no. 2, 1995, pages 413-425, XPO02235768 ISSN: 0003-9861 X PAGE THEODORE ET AL: "Purification and characterization of human lymphoblast N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminelester alp	Category	Citation of document with indication, where appropriate, of relevant passages			
X LEE JIN KYU ET AL: "Purification and Characterization of Human Serum N-Acetylglucosamine-1-phosphodiester alpha-N-Acetylglucosamindidase." ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, VOI. 319, no. 2, 1995, pages 413-425, XY002235768 ISSN: 0003-9861 see the whole document X PAGE THEODORE ET AL: "Purification and characterization of human lymphoblast N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase." GLYCOBIOLOGY, VOI. 6, no. 6, 1996, pages 619-626, XP00908337 ISSN: 0959-6658 Y see abstract and page 624, right column, last par.	Х	"Purification and kinetic parameters of bovine liver N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 269, no. 3, 1994, pages 1718-1726, XPO02235767	19,20	·I	
Characterization of Human Serum N-Acetylglucosamine-1-phosphodiester alpha-N-Acetylglucosaminidase." ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol. 319, no. 2, 1995, pages 413-425, XPO02235768 ISSN: 0003-9861 See the whole document Z PAGE THEODORE ET AL: "Purification and characterization of human lymphoblast N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase." ELYCOBIOLOGY, vol. 6, no. 6, 1996, pages 619-626, XPO09008337 ISSN: 0959-658 SEANCHED (MALCIT) TECHNICAL FIELDS SEANCHED (MALCIT) 19,20 19,2	Y				
Y see the whole document Z1-34, 50-56 X PAGE THEODORE ET AL: "Purification and characterization of human lymphoblast M-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase." GLYCOBIOLOGY, vol. 6, no. 6, 1996, pages 619-626, XPO09008337 ISSN: 0959-6658 see abstract and page 624, right column, last par. 21-34	X	Characterization of Human Serum N-Acetylglucosamine-1-phosphodiester alpha-N-Acetylglucosaminidase." ARCHIVES OF BIOCHEMISTRY AND BIOPHYSICS, vol. 319, no. 2, 1995, pages 413-425, XP002235768	19,20	TECHNICAL FIELDS SEARCHED (InLCI.7)	
characterization of human lymphoblast N-acetylglucosaminel-phosphodiester alpha-N-acetylglucosaminidase." GLYCOBIOLOGY, vol. 6, no. 6, 1996, pages 619-626, XP009008337 ISSN: 0959-6658 Y see abstract and page 624, right column, last par.	Υ				
Y see abstract and page 624, right column, last par.	Х	characterization of human lymphoblast N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase." 6LYCOBIOLOGY, vol. 6, no. 6, 1996, pages 619-626, XP009008337	19,20		
-/	Y	see abstract and page 624, right column, last par.	21-34		



PARTIAL EUROPEAN SEARCH REPORT

	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)	
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Y	BARANSKI THOMAS J ET AL: "Lysosomal enzyme phosphorylation: I. Protein recognition determinants in both lobes of procathepsin D mediate its interaction with UDP-GICNAC:Lysosomal enzyme N-acetylglucosamine-1-phosphotransferase." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 267, no. 32, 1992, pages 23342-23348, XP002235769 ISSN: 0021-9258 see the whole document	35–48	
Y	TIKKANEN RITVA ET AL: "Several cooperating binding sites mediate the interaction of a lysosomal enzyme with phosphotransferase." EMBO (EUROPEAN MOLECULAR BIOLOGY ORGANIZATION) JOURNAL, vol. 16, no. 22, 17 November 1997 (1997–11–17), pages 6684–6693, RODO2235770 ISSN: 0261–4189 see the Whole document	35-48	TECHNICAL FIELDS SEARCHED (Int.Cl.7)
X	MATSUURA ET AL: "Human alpha-galactosidase A: characterization of the N-linked oligosaccharides on the intracellular and secreted glycoforms overexpressed by Chinese hamster ovary cells" GLYCOBIOLOGY, IRL PRESS,, GB, vol. 8, no. 4, April 1998 (1998-04), pages 329-339, XP000925912 ISSN: 0959-6658 see abstract	49,57	
		:	

SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 00 96 1335

CLASSIFICATION OF THE APPLICATION (Int.CL7) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document with indication, where appropriate, Relevant to claim Category of relevant passages MAGUCHI S ET AL: "ELEVATED ACTIVITY AND 49.57 INCREASED MANNOSE 6-PHOSPHATE IN THE CARBOHYDRATE MOIETY OF CATHEPSIN D FROM HUMAN HEPATOMA" CANCER RESEARCH, vol. 48, no. 2, 1988, pages 362-367, XP009008325 ISSN: 0008-5472 see abstract BARTON N W ET AL: "THERAPEUTIC RESPONSE X 74-81 TO INTRAVENOUS INFUSIONS OF GLUCOCEREBROSIDASEIN A PATIENT WITH GAUCHER DISEASE" TECHNICAL FIELDS PROCEEDINGS OF THE NATIONAL ACADEMY OF (Int.CL7) SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 87, March 1990 (1990-03), pages 1913-1916, XP002905934 ISSN: 0027-8424 see the whole document χ BRADY R O ET AL: "Modifying Exogenous 74-81 Glucocerebrosidase for Effective Replacement Therapy in Gaucher Disease."
JOURNAL OF INHERITED METABOLIC DISEASE, vol. 17, no. 4, 1994, pages 510-519, XP009008428 ISSN: 0141-8955 see the whole document, esp. Fig. 4 -/--

90 FORM 1503 09.98 (P04C26)



PARTIAL EUROPEAN SEARCH REPORT

Application Numbe

EP 00 96 1335

	DOCUMENTS CONSIDERED TO BE RELEVANT	CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
ategory	 Citation of document with indication, where appropriate, of relevant passages 	Relevant to claim	
(KAKKIS E D ET AL: "OVEREXPRESSION OF THE HUMAN LYSOSOMAL ENZYME ALPHA-L-IDURONIDASE IN CHINESS HAMSTER OVARY CELLS" PROTEIN EXPRESSION AND PURIFICATION, ACADEMIC PRESS, US, vol. 5, no. 3, June 1994 (1994-06), pages 225-232, XP0000857380 ISSN: 1046-5928 see the whole document	74-81	• MGC • ==
(ZHAO KE-WEI ET AL: "Carbohydrate structures of recombinant human alpha-L-iduronidase secreted by Chinese hamster ovary cells." JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 272, no. 36, 1997, pages 22758-22765, XP002235771 ISSN: 0021-9258 see the whole document—	74-81	TECHNICAL FIELDS SEARCHED (INLCL7)
	ZIEGLER R J ET AL: "CORRECTION OF ENZYMATIC AND LYSOSOMAL STORAGE DEFECTS IN FABRY MICEBY ADENOVIRUS—MEDIATED GENE TRANSFER" HUMAN GENE THERAPY, XX, XX, vol. 10, no. 10, 1 July 1999 (1999-07-01), pages 1667-1682, XP001012918 ISSN: 1043-0342 see the whole document	74-81	
	-/		



SUPPLEMENTARY PARTIAL EUROPEAN SEARCH REPORT Application Number

	DOCUMENTS CONSIDERED TO BE RELEVANT		CLASSIFICATION APPLICATION	Int.C1.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim		
Y	SUN HUAICHANG ET AL: "Retrovirus" vector-mediated correction and cross-correction of lysosomal alpha-mannosidase deficiency in human and feline fibroblasts." HUMAN GENE THERAPY, vol. 10, no. 8, 20 May 1999 (1999-05-20), pages 1311-1319, XP009008322 ISSN: 1043-0342 see the Whole document	74-81		-
,	REUSER A J J ET AL: "Lysosomal storage	74-81		
	diseases: Cellular pathology, clinical and genetic heterogeneity, therapy."			
	ANNALES DE BIOLOGIE CLINIQUE,	8	TECHNICAL FIE SEARCHED	(Int.CI.7)
	vol. 52, no. 10, 1994, pages 721-728, XP009008339			
	ISSN: 0003-3898 see pages 726-727 "Therapy"			
	see pages 720 727 Therapy			
		l		
		1		

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 00 96 1335

. This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is no rowy liable for these particulars which are merely given for the purpose of information.

26-03-2003

Patent docume cited in search re		Publication date		Patent fam member(Publication date
WO 9931117	Α	24-06-1999	AU	2306499	A	05-07-1999
			CA	2315295	A1	24-06-1999
			EP	1039801	A1	04-10-2000
			EP	1040117	A1	04-10-2000
			JP	2002508167	T	19-03-2002
			WO	9854963	A2	10-12-1998
			WO	9931117	A1	24-06-1999
			US	6525174	B1	25-02-2003
			ΑU	1931399	Α	05-07-1999
			CA	2314379	A1	24-06-1999
			EP	1044210	A1	18-10-2000
			JP	2002508166	T	19-03-2002
			WO	9931116	A1	24-06-1999
			US	2001024813	A1	27-09-2001
			ΑU	6552198	Α	29-09-1998
			EP	0973892	A2	26-01-2000
			JP	2001524814	T	04-12-2001
			WO	9840483	A2	17-09-1998
			US	6448230	B1	10-09-2002
			US	2002172994	A1	21-11-2002